

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION**

In re Flint Water Cases.

Judith E. Levy
United States District Judge

_____/

This Order Relates To:

Carthan, et al. v. Snyder et al.
Case No. 16-10444

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**OPINION AND ORDER GRANTING IN PART AND DENYING IN
PART DEFENDANTS VEOLIA NORTH AMERICA, LLC, VEOLIA
NORTH AMERICA, INC., AND VEOLIA WATER NORTH
AMERICA OPERATING SERVICES, LLC'S MOTION TO
EXCLUDE CERTAIN OPINIONS AND TESTIMONY OF DR.
DARYN REICHERTER [2459]**

This opinion is yet another in a series of opinions addressing the admissibility of the testimony and reports of nine experts retained by Plaintiffs¹ in anticipation of the issues class trial, set to begin on

¹ See ECF No. 2454 (VNA's motion to exclude opinions and testimony of Dr. Larry Russell); ECF No. 2455 (VNA's motion to exclude opinions and testimony of Dr. Clifford P. Weisel); ECF No. 2456 (VNA's motion to exclude testimony and reports of Robert A. Michaels); ECF No. 2458 (VNA's motion to exclude opinions and testimony of Dr. David Keiser); ECF No. 2459 (VNA's motion to exclude opinions and testimony of Dr. Daryn Reicherter); ECF No. 2460 (VNA's motion to exclude opinions and testimony of Dr. Paolo Gardoni); ECF No. 2461 (VNA's motion to exclude opinions and testimony of Dr. Howard Hu); ECF No. 2483 (VNA's motion to exclude opinions and testimony of Dr. Panagiotis (Panos) G. Georgopoulos); and ECF No. 2462 (VNA's

February 13, 2024. (ECF No. 2435.) Defendants argue that these experts cannot meet the standards set by Federal Rule of Evidence 702 and *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579 (1993).

Currently before the Court is the motion by Veolia North America, LLC, Veolia North America, Inc., and Veolia Water North America Operating Services, LLC (collectively “VNA”) to exclude certain testimony and opinions of Dr. Daryn Reicherter. (ECF No. 2459.) On September 13, 2023, a hearing was held and argument was heard. For the reasons set forth below, VNA’s motion is granted in part and denied in part.

I. Background

Dr. Daryn Reicherter is the director of the Human Rights in Trauma Mental Health Program and a Clinical Professor at Stanford University, School of Medicine’s Department of Psychiatry and Behavioral Sciences. (ECF No. 2459-3, PageID.79270.) Dr. Reicherter has a B.A. in Psychobiology and Philosophy from University of California, Santa Cruz, an M.D. from New York Medical College, and he completed

motion to exclude opinions and testimony of Dr. Robert A. Simons) (in ECF Nos. 2606 and 2617 the Court inadvertently failed to include the motion related to Dr. Simons’s testimony in this list).

an internship and residency in the Department of Psychiatry and Behavioral Sciences at Stanford. (ECF No. 2459-3, PageID.79301.) He is an expert in “cross-cultural trauma psychiatry” and “the effects of trauma on human psychology throughout the lifespan.” (*Id.* at PageID.79296.) He has a variety of academic publications, as well as experience consulting on trauma psychiatry internationally. (*Id.* at PageID.79296–79300, 79304–79308.)

Dr. Reicherter offers his opinions and testimony regarding general causation, specifically whether the water contamination in Flint was capable of causing harm to Flint residents’ mental health and emotional well-being. (*Id.* at PageID.79269.) Dr. Reicherter contends that the contaminated water was a “traumatic stressor” that harmed Flint residents. (*Id.* at PageID.79272.) He draws on the concept of community trauma, “a collective experience of psychological trauma shared by a community exposed to overwhelming stressors that threaten the safety of the community.” (*Id.* at PageID.79273.) He opines that the Flint Water Crisis is “capable of causing severe, long lasting deleterious psychological outcomes as a result of the toxic water contamination, including ‘extreme emotional distress,’ post-traumatic stress disorder, anxiety, depression,

and diminished ability to cope with typical levels of stress that would be expected in United States samples.” (ECF No. 2459-3, PageID.79294.) Dr. Reicherter suggests that events threatening “the actual or perceived safety of a community causes increased risk of poor psychological outcomes for persons across the community,” and that this sort of harmful process unfolded in Flint due to contaminated water. (ECF No. 2508, PageID.83098.)

On May 19, 2023, VNA filed this motion to exclude certain opinions and testimony Dr. Reicherter, specifically raising objections to his use of the concept of community trauma in his analysis. (ECF No. 2459, PageID.79246–79247.)

II. Legal Standard

Federal Rule of Evidence 702 governs the admissibility of expert testimony and requires that: (1) the witness must be qualified, (2) the testimony must be relevant, and (3) the testimony must be reliable. Fed. R. Evid. 702; *In re Scrap Metal Antitrust Litig.*, 527 F.3d 517, 528–29 (6th Cir. 2008). As the Supreme Court explained in *Daubert*, Rule 702 imposes a “gatekeeping” obligation on the courts to ensure that scientific

testimony “is not only relevant, but reliable.” *Daubert*, 509 U.S. at 589; *see also Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 147 (1999).

“Rejection of expert testimony is the exception, rather than the rule.” *United States v. LaVictor*, 848 F.3d 428, 442 (6th Cir. 2017) (quoting *In re Scrap Metal*, 527 F.3d at 529–30)). But the burden is on Plaintiffs to show by a “preponderance of proof” that the proffered expert meets the standards of Rule 702 as interpreted by *Daubert*. *Pride v. BIC Corp.*, 218 F.3d 566, 578 (6th Cir. 2000) (quoting *Daubert*, 509 U.S. at 592).

III. Analysis

VNA argues that “[d]uring the issues trial, Dr. Reicherter’s opinions should be limited to explaining why, based on general psychological principles, the contaminated water can cause individuals to experience adverse mental-health effects.” (ECF No. 2459, PageID.79246.) They argue that his opinions about community trauma (1) are irrelevant and (2) are not based on a reliable methodology. (*Id.* at PageID.79246–79247.)

A. The Relevance of Dr. Reicherter’s Testimony About Community Trauma

First, VNA argues that Dr. Reicherter's testimony is irrelevant to the certified issue of whether the water contamination can cause harm to Flint class members' mental health. (ECF No. 2250, PageID.73963.) VNA argues that discussion of "community trauma" does not get at whether the contamination was capable of harming individual residents of Flint. (ECF No. 2459, PageID.79253–79254.) *Daubert* held that evidence must be "relevant to the task at hand." 509 U.S. at 597. Evidence is relevant if "(a) it has any tendency to make a fact more or less probable than it would be without the evidence; and (b) the fact is of consequence in determining the action." Fed. R. Evid. 401. As a result, the evidence proffered by Dr. Reicherter must tend to make it more probable that the water contamination caused harm to Flint residents' mental health.

There are three ways Dr. Reicherter discusses the concept of community trauma. First, Dr. Reicherter suggests the existence of collective harm, alleging community trauma as a harm to the community itself, as opposed to the individuals who make up the community. Second, Dr. Reicherter also includes, briefly, an individual harm discussion, indicating that individuals experience a distinctive individual harm to mental health, a harm called community trauma. Third, he puts forward

a causal concept, asserting that community trauma involves an event with which individuals struggle to cope, which creates a higher risk of certain mental health disorders including trauma-related disorders, depressive disorders, anxiety disorders, and learning disorders in children. Dr. Reicherter's Report suggests all three arguments at different points. The Court will therefore address the relevance and admissibility of each in turn.

The first two, community trauma as collective harm and community trauma as individual harm are not admissible. The third causal concept, however, is relevant and admissible.

(1) Community Trauma as Collective Harm: Insofar as Dr. Reicherter is testifying that the community—understood as an abstract collective over and above the individuals that constitute it—has been harmed, such a claim is not relevant to the question at issue in this case. Plaintiffs here are a class of “persons and entities,” not the community as a whole. (ECF No. 1957, PageID.68127–68128.) At times, Dr. Reicherter uses language that can be read to describe the community itself as the injured party. (See, e.g., ECF No. 2459-3, PageID.79273 (“the mental health of the community as a whole will be adversely affected, and the

risk for individuals within that community will predict a higher prevalence of mental health disorders”).) By this language, Dr. Reichert may simply mean that many individual residents in the community will suffer mental health consequences due to traumatic events, rather than that the community of Flint in the abstract has been harmed. The former is relevant to this case, while the latter is not.

(2) Community Trauma as Individual Harm: At other points, Dr. Reicherter describes community trauma as a “collective experience” or “collective sense of instability,” a harm experienced by individuals that is shared throughout the community. (ECF No. 2459-3, PageID.79275.) He also refers to “a sub-clinical experience of trauma related psychological disturbance.” (*Id.*) What is different about this concept of community trauma is that it involves a shared psychological experience rather than an experience that an individual has in isolation. Dr. Reicherter contends that certain sorts of traumatic events can cause this subclinical harm. (ECF No. 2459-3, PageID.79275.)

In general, such an injury is relevant to the claims being made by Plaintiffs, which include “[e]motional trauma and negative mental health outcomes.” (ECF No. 2283, PageID.74157.) If the Flint Water Crisis can

cause an individual psychological harm categorized as “community trauma,” then that fact would help determine this action by establishing one of Plaintiffs’ claims related to Certified Issue 3 about general causation. Fed. R. Evid. 401. Community trauma in this sense could be one of a list of negative mental health outcomes water contamination could cause.

While this version of community trauma may be relevant, it may not be admissible for other reasons. The CASPER data Reicherter cites do not include or analyze “community trauma” as an individual harm.² (ECF No. 2459-3, PageID.79280.) Nor does the Brooks study that Dr. Reicherter cites, which is “a review of the major, published literature studies resulting from the mental health effects of the Flint Water Crisis,” attempt to measure or quantify community trauma as an individual harm. (ECF No. 2459-3, PageID.79272.) The only paragraph that references the concept of a “a sub-clinical experience of trauma related psychological disturbance” contains no citations. (ECF No. 2459-

² As discussed below, CASPER stands for “Community Assessment for Public Health Emergency Response.” It is a Centers for Disease Control and Prevention (“CDC”) tool for collecting self-reported data, which was used for collecting mental health data in Flint. (ECF No. 2459-4, PageID.79326–79327.)

3, PageID.79275.) As a result, although such a phenomenon may be relevant in this case, this conception of community trauma is only a brief aside in Dr. Reicherter's report and is not supported or explained in a manner that would enable the Court to evaluate its reliability. While this concept of community trauma as individual harm might play an important role in another case, it cannot do so here, at least not based on what is provided in Dr. Reicherter's report. However, he does offer a further conception of community trauma that avoids these problems.

(3) Community Trauma as Cause: At several points, Dr. Reicherter appears to be making the more straightforward point that events can traumatize individuals, which can make individuals more likely to experience certain mental health disorders. (*Id.* at PageID.79273.) He indicates that this process is especially likely in vulnerable communities that have already been exposed to certain stressors. (*Id.* at PageID.79273.) Dr. Reicherter suggests that individual trauma can lead to dysfunction in community institutions like schools and hospitals, the failure of which can further harm individuals' mental health. (*Id.* at PageID.79273–79274.) This latter point is clearly relevant to general causation, insofar as it suggests that the water contamination can harm

individual mental health, specifically through the mechanism of dysfunctional community institutions. Here, Dr. Reicherter's discussion of "community trauma" is admissible to address general causation by drawing on an established body of academic literature. (*Id.* at PageID.79272.) In the context of this case, testimony about community trauma may be used to describe causal mechanisms at the community level that harm individuals' mental health.

Accordingly, Dr. Reicherter's testimony about community trauma must be limited to discussing community trauma as a causal mechanism that makes emotional trauma and negative mental health outcomes for individuals more likely. Insofar as his opinion includes reference to (1) community trauma as a distinct harm to the community in the abstract or (2) a harm to individuals that is distinct from other mental health harms and disorders, those opinions are not admissible.

B. Dr. Reicherter's Testimony and Rule 403

VNA further argues, under Rule 403, that Dr. Reicherter's testimony would "waste time, confuse the jury, and be far more prejudicial than probative." (ECF No. 2459, PageID.79254.) VNA does not develop these arguments at any length, except to complain that Dr.

Reicherter's discussion of Flint's socioeconomic conditions would "[appeal] to the jury's sympathy." (*Id.*) At bottom, these objections depend upon the relevance arguments VNA makes. If Dr. Reicherter's testimony is irrelevant, then it must be excluded regardless of these further arguments made by VNA. But to the extent one form of Dr. Reicherter's conclusions about community harm is admissible, VNA has failed to offer a convincing argument that it would be more prejudicial than probative.

Moreover, the fact that Dr. Reicherter's opinion references socioeconomic conditions is not unfair. In fact, although VNA complains about Dr. Reicherter's discussion of socioeconomic conditions here, they later argue that the reliability of his opinion depends on addressing the presence of confounding variables like "high rates of poverty, poor health outcomes, low quality of life, and high crime rates." (ECF No. 2459, PageID.79259.) Testimony addressing an issue cannot both be required for admissibility and prejudicial at the same time. Here, Dr. Reicherter's discussion of the socioeconomic conditions in Flint in an analysis of its population's mental health is not prejudicial. VNA's arguments here under Rule 403 fail.

C. The Reliability of Dr. Reicherter's Testimony About Community Trauma

VNA further objects that Dr. Reicherter's testimony about community trauma is unreliable and should be excluded on this basis. First, VNA argues that Dr. Reicherter's data cannot reliably show elevated levels of mental health disorders, which undermines his conclusion about community trauma. Second, VNA argues that even if there were elevated levels of mental health disorders in Flint after the Water Crisis began, Dr. Reicherter cannot reliably show that those elevated levels were caused by the Water Crisis, as opposed to other factors.

i. The Reliability of Dr. Reicherter's Method for Determining Whether a Community has Experienced Trauma

VNA argues that Dr. Reicherter's opinion that there was community trauma in Flint is unreliable, due to flaws in his methodology. Under Rule 702, an expert's testimony must be based on "reliable principles and methods." Fed. R. Evid. 702. To assess reliability, *Daubert* provides a "flexible" set of factors to consider when assessing a method: whether it can be (and has been) tested, whether it has been subject to peer review, whether there are known error rates and standards

controlling a method's operation, and general acceptance of the approach.
509 U.S. at 593–94.

VNA objects to the data sets that Dr. Reicherter compares when he analyzes the rates of mental health problems in Flint compared to national levels. (ECF No. 2459, PageID.79255–79256.) In his report, Dr. Reicherter considers American Psychiatric Association data about average prevalence rates for certain mental disorders occurring within a twelve-month period in the United States. (ECF No. 2459-3, PageID.79279.) He then notes that the rates of these and other mental health disorders in Flint are “markedly above average and constitute a public mental health crisis.” (ECF No. 2459-3, PageID.79280.) VNA argues that it is problematic that the national data is from structured clinical interviews while the Flint data is from residents' responses to survey questions. (ECF No. 2459, PageID.79256.) They contend that the data in the Flint study is unreliable and that the comparison between the two datasets is also unreliable. (*Id.* at PageID.79257–79258.)

VNA's objection that the data in the Flint study is unreliable is unconvincing. First, the core of their critique is that the data is based on self-reported responses. (ECF No. 2459, PageID.79257.) They argue that

such data is “inherently unreliable.” (ECF No. 2459, PageID.79257.) As part of their support for this conclusion, they cite an article focused on research within business settings, which—even in that specific context—reaches much more limited conclusions than the broad claim VNA makes. (ECF No. 2459-8, PageID.79439.) Even VNA’s own expert only goes so far as to suggest that data gathering through self-reports is less reliable than other methods, not that it is inherently unreliable. (ECF No. 2459, PageID.79257.) The specific method at issue here, as well as self-reporting generally, is a mainstream technique in this field of study. CASPER, the methodology used to capture this data, is a CDC tool and is now widely used in disaster settings, as well as non-emergency contexts. Centers for Disease Control and Prevention, Overview of CASPER, <https://www.cdc.gov/nceh/casper/overview.htm>. VNA’s expert also describes some of the other sources Dr. Reicherter relies upon as involving self-reporting, but notably these studies were published in peer-reviewed journals. (ECF No. 2459-9, PageID.79452.) Data-gathering via self-reports appears to have been subject to peer review and to have reasonably wide acceptance. *Daubert*, 509 U.S. at 593–94. VNA

does not offer compelling reasons to view it as error prone or unreliable to an extent that would justify its exclusion.

While VNA cites several cases that exclude self-reporting, none of them are compelling in a case like this one. (ECF No. 2459, PageID.79257.) *Madej v. Maiden*, 951 F.3d 364, 375–76 (6th Cir. 2020) (involving a self-reported condition that had been rejected as without scientific basis in many previous precedents); *Johnson v. Williams*, No. 15-cv-13856, 2017 WL 11318160, at *9 n.10 (E.D. Mich. Aug. 7, 2017) (including a footnote citing cases suggesting psychiatrists have to rely on self-reports, but indicating that parroting self-reports with nothing else is insufficient); *Guthrie v. Ball*, No. 11-cv-333, 2014 WL 11581410, at *17 (E.D. Tenn. Oct. 10, 2014) (holding, in a case involving individual diagnoses, that a doctor may not just parrot what a patient says they suffer from, rather than relying on available medical records). In addition to not involving facts comparable to those found in this case, these cases do not support the claim that methodologies that gather data based on self-reporting should generally be excluded as unreliable under *Daubert* and Rule 702.

VNA argues that the comparison Dr. Reicherter draws between the nationwide APA data and the CASPER data from Flint is unreliable, too. Terming it an “apples-to-oranges comparison,” VNA suggests that it is unreliable to compare nationwide data based on clinical interviews with data from Flint based on survey responses. (ECF No. 2459, PageID.79256, 79258.) They argue that Dr. Reicherter’s brief comparison is as if “someone concluded that a city has elevated levels of basketball talent because ten percent of the high school players in the city ‘self report’ that they are top-level college recruits, whereas professional college scouts say that, on average, only one percent of high school players nationally are top-level recruits.” (ECF No. 2528, PageID.83879.) This example implies that—like aspiring athletes with delusions of grandeur—residents of Flint are likely to have exaggerated or overstated their mental health disorders on a study commissioned by local public health stakeholders in the aftermath of the Flint Water Crisis. Such a strained analogy ultimately rests on the notion that self-reporting is inherently unreliable, an argument the Court has already rejected in the discussion set forth above.

Dr. Reicherter indicated in his deposition that this comparison was “the best comparison [he had] based on the data that’s available.” (ECF No. 2459-5, PageID.79355.) That hardly resembles VNA’s contention that this approach is not the sort that an expert would reasonably rely upon. (ECF No. 2459, PageID.79258.) VNA can certainly challenge the comparison between these datasets in cross-examination of Dr. Reicherter, but their attacks on this comparison do not support excluding this testimony. The Court’s role is not to ensure an expert’s opinion is based on the “most ideal scientific evidence” but rather that it is based on “good grounds, based on what is known.” *Little Hocking Water Ass’n, Inc. v. E.I. du Pont de Nemours and Co.*, 90 F. Supp. 3d 746, 770 (S.D. Ohio 2015) (cleaned up). Dr. Reicherter’s comparison between these data sets meets that bar.

ii. The Reliability of Dr. Reicherter’s Causation Opinion

VNA also argues that Dr. Reicherter’s opinion that the contaminated water in Flint caused community trauma is not based on a reliable methodology. (ECF No. 2459, PageID.79259.) They suggest that Dr. Reicherter is insufficiently knowledgeable about the Flint Water Crisis and that he did not sufficiently exclude other possible causal

explanations for the mental health disorders he attributes to the Water Crisis. (ECF No. 2459, PageID.79259–79260.)

VNA’s attacks on Dr. Reicherter’s knowledge of the Crisis can be dealt with briefly. In his deposition, he refers to the start of the Flint Water Crisis as “2014 and sort of evolving into 2015” and offers only a general discussion of its causes. (ECF No. 2459-5, PageID.79332.) He also is uncertain about whether the Crisis has been resolved at the time of the deposition. (*Id.*) None of these timeline-related matters are relevant to the admissibility of Dr. Reicherter’s testimony. He is testifying to the consequences of the Crisis for Flint residents’ mental health, not the Crisis’s causes or resolution. The fact that he offers vague or general comments on issues that are not the core subject of his testimony is not a basis for finding his central arguments unreliable.

Next, VNA questions whether Dr. Reicherter adequately accounts for confounding variables that might explain the mental health harms his methodology detected, arguing the lack of such an account makes his testimony about community trauma unreliable. (ECF No. 2459, PageID.79259–79260.) VNA presents Flint’s social and economic challenges as something that Dr. Reicherter “admits,” but that he does

not account for or exclude. (*Id.*) Under *Daubert* and Rule 702, the admissibility of expert testimony about causation does not require the elimination of all other possible variables; such arguments generally speak to the probative value of the testimony. *Conwood Co., L.P. v. U.S. Tobacco Co.*, 290 F.3d 768, 794 (6th Cir. 2002). There must not, however, be a failure to consider alternative causes that would raise a “red flag” and create admissibility concerns. *Newell Rubbermaid, Inc. v. Raymond Corp.*, 676 F.3d 521, 527 (6th Cir. 2012).

In his report, Dr. Reicherter addresses other potential causal factors in several ways, including providing citations that support his overall claim about causation. First, he incorporates poverty, poor health outcomes, and crime rates by suggesting they make the population in Flint more susceptible to stressors. (ECF No. 2459-3, PageID.79277.) That point is central to his argument. Insofar as VNA’s concern is disaggregating the effects of the Water Crisis and the impacts of other factors, Dr. Reicherter does not ignore this issue either. He, for instance, cites to research that controls for “socio-demographics” in assessing mental health consequences in Flint in the wake of the Water Crisis. (ECF No. 2459-3, PageID.79280.) Plaintiffs also point to a variety of

further research Dr. Reicherter cites that suggests a causal relationship between the Water Crisis and mental health outcomes. (ECF No. 2508, PageID.83087–83089.) To further support his opinions, Dr. Reicherter points out that Flint’s rates of mental health disorders parallel rates in other traumatized communities that academics have studied. (ECF No. 2459-3, PageID.79281.)

Dr. Reicherter’s review of available academic research about Flint, in combination with his comparative analyses, undermine VNA’s contention that he fails to consider alternative explanations or generally fails to support his causal conclusions. As a result, while the CASPER data on its own may not firmly establish causation, the various sources Dr. Reicherter draws upon undermine VNA’s arguments that he insufficiently considers other variables that might have an impact on his opinions about causation. Accordingly, VNA’s arguments about the failure to consider alternative explanations fail.

IV. Conclusion

For the reasons set forth above, VNA’s motion to exclude Dr. Reicherter’s testimony about community trauma is granted in part and denied in part. Opinions about community trauma as a collective harm

to the community in the abstract or about community trauma as a type of individual harm are not admissible in this case. Dr. Reicherter's opinions about community trauma as a cause of individual mental health disorders are admissible.

IT IS SO ORDERED.

Dated: September 26, 2023
Ann Arbor, Michigan

s/Judith E. Levy
JUDITH E. LEVY
United States District Judge

CERTIFICATE OF SERVICE

The undersigned certifies that the foregoing document was served upon counsel of record and any unrepresented parties via the Court's ECF System to their respective email or first-class U.S. mail addresses disclosed on the Notice of Electronic Filing on September 26, 2023.

s/William Barkholz
WILLIAM BARKHOLZ
Case Manager